



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,361	04/28/2000	GUIDO MORUZZI	027650-857	5394
7590 09/25/2006				
BURNS DOANE SWECKER & MATHIS				
PO BOX 1404				
ALEXANDRIA, VA 22313-1404				
		EXAMINER		
		CHORBAJI, MONZER R		
		ART UNIT PAPER NUMBER		
		1744		
DATE MAILED: 09/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/530,361

Applicant(s)

MORUZZI, GUIDO

Examiner

MONZER R. CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-6, 15, 17, 18 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6, 15, 17, 18 and 21-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

**This final action is in response to the Reply received on 06/30/2006**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15, 17, 26 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Koder et al (U.S.P.N. 4,366,125).

Regarding claims 15, 26 and 29, Koder teaches an apparatus (figure 1) for sterilizing a packaging sheet material (col.1, lines 8-13) including the following: means for applying a liquid solution of hydrogen peroxide onto the surface of web material into by immersing the material into a hydrogen peroxide bath (col.6, lines 25-28), the apparatus is capable of being connected in sequence to a means for applying a stream of air (figure 1, 42) onto the surface of the packaging sheet material such that the stream of air is capable of substantially removing all but a residual quantity of hydrogen peroxide, the apparatus is capable of being connected in sequence to UV irradiation means (figure 1:34) that is capable of irradiating at wavelength between 200nm and 320 nm (figure 1, C) and the apparatus includes means for advancing (figure 1:3 or 6) the packaging material such that the apparatus is capable of continuously and sequentially advancing the packaging material from the applying means through the means for directing a stream of air and then to the irradiating means.

Regarding claims 17 and 30-31, Koderia teaches the use of UV irradiation means (figure 1:34) that is capable of irradiating at wavelength between 200nm and 320 nm (figure 1, C).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 18, 27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koderia et al (U.S.P.N. 4,366,125) as applied to claims 15, 26, 31 and further in view of Castberg et al (U.S.P.N. 5,744,094).

Regarding claims 18, 27 and 32, Koderia fails to disclose the use of an excimer lamp. Castberg discloses that it known to use an excimer lamp (col.2, lines 36-38). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Koderia apparatus to include an excimer lamp as

disclosed by Castberg since the geometry of the beam may be altered in response to changes in fluid characteristics, i.e., aqueous hydrogen peroxide solution, in order to improve the efficiency of sterilization of wet surfaces (col.2, lines 34-38).

6. Claims 4 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doucette et al (U.S.P.N. 3,513,627) in view of Kodera et al (U.S.P.N. 4,366,125), DiGeronimo (U.S.P.N. 4,494,357) and further in view of Loliger et al (U.S.P.N. 3,692,468).

Regarding claim 4, Doucette discloses an apparatus and a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs contaminated with microorganisms that includes the following: immersing the web into a liquid sterilant (figure 1:73) over an inherent time interval, applying heat from heater plates (figure 1:89 and col.3, lines 58-62) for drying the sterilant so that a substantial amount of the sterilant is removed from the surface of the web, then UV irradiating the web (figure 1:91). Doucette fails to teach the following: the use of liquid hydrogen peroxide, the use of air for retaining a residual quantity of hydrogen peroxide absorbed by or located adjacent to microorganisms present on the surface of the sheet material, UV wave length of about 200 nm and 320 nm, temperature of the liquid hydrogen peroxide and contact time from 0.5 seconds to 2 seconds. Kodera teaches a method for sterilizing a packaging sheet material (col.1, lines 8-13) including the following: applying a liquid solution of hydrogen peroxide to the surface of a packaging material by immersing the material in a hydrogen peroxide bath (col.6, lines 25-28) at a certain temperature (col.4, lines 23-25), which includes microorganisms, applying a stream of air to the packaging sheet material for removing a

substantial amount of hydrogen peroxide from the surface of the packaging material (col.5, lines 10-15), irradiating the surface with UV light at a certain wavelength value (figure 1, C) and immersing for the material for one second (col.6, lines 25-28 and lines 36-39). The specification only teaches of microorganisms without providing any significance. As a result, the microorganisms present on the surfaces of the packaging sheet material in Kodera intrinsically absorb the residual hydrogen peroxide left after the step of drying. In addition, Kodera teaches the importance of the synergistic effect produced by the combination of hydrogen peroxide and UV (col.1, lines 13-18). Clearly Kodera provides for a trace quantity of hydrogen peroxide for its interaction with the UV light. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Kodera, col.1, lines 15-18), to immerse web material for one second so that the sterilization process is performed over shorter cycles and to substitute heater plates with hot air since aseptic hot air sterilizes and dries the two surfaces of the web material (Kodera, col.5, lines 12-14).

Kodera fails to explicitly disclose a wavelength range value for the UV light and a temperature range value for the hydrogen peroxide bath. DiGeronimo teaches irradiating at 254 nm (col.2, lines 50-52). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by irradiating at 254 nm as taught by DiGeronimo since the lamp at such a wavelength operates at 99.9% efficiency (col.2, lines 50-52).

DiGeronimo fails to disclose a temperature range value for the hydrogen peroxide bath. Loliger teaches maintaining the hydrogen peroxide bath temperature at 60 degree Celsius (col.2, lines 70-71). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by heating the hydrogen peroxide bath to 60 degree Celsius as taught by Loliger since it is known in the art that at such a temperature packing sheet residence time in the bath is only 6 second that even kills heat-resistant germs (col.1, lines 30-33).

Regarding claim 28, Doucette discloses an apparatus and a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs contaminated with microorganisms that includes the following: immersing the web that is inherently hydrophobic into a liquid sterilant (figure 1:73) over an inherent time interval, applying heat from heater plates (figure 1:89 and col.3, lines 58-62) for drying the sterilant so that a substantial amount of the sterilant is removed from the surface of the web, then UV irradiating the web (figure 1:91). Doucette fails to teach the following: the use of liquid hydrogen peroxide, the use of air for retaining a residual quantity of hydrogen peroxide absorbed by or located adjacent to microorganisms present on the surface of the sheet material, UV wave length of about 200 nm and 320 nm, temperature of the liquid hydrogen peroxide, contact time from 0.5 seconds to 2 seconds and a temperature of the heated air. Koderia teaches a method for sterilizing a packaging sheet material (col.1, lines 8-13) including the following: applying a liquid solution of hydrogen peroxide to the surface of a packaging by immersing the material in a hydrogen peroxide bath (col.6, lines 25-28)

at a certain temperature (col.4, lines 23-25), which includes microorganisms, applying a stream of air the packaging sheet material for removing a substantial amount of hydrogen peroxide from the surface of the packaging material (col.5, lines 10-15), irradiating the surface with UV light at a certain wavelength value (figure 1, C) and immersing for the material for one second (col.6, lines 25-28 and lines 36-39). The specification only teaches of microorganisms without providing any significance. As a result, the microorganisms present on the surfaces of the packaging sheet material in Koderer intrinsically absorb the residual hydrogen peroxide left after the step of drying. In addition, Koderer teaches the importance of the synergistic effect produced by the combination of hydrogen peroxide and UV (col.1, lines 13-18). Clearly Koderer provides for a trace quantity of hydrogen peroxide for its interaction with the UV light. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Koderer, col.1, lines 15-18), to immerse web material for one second so that the sterilization process is performed over shorter cycles and to substitute heater plates with hot air since aseptic hot air sterilizes and dries the two surfaces of the web material (Koderer, col.5, lines 12-14).

Koderer fails to explicitly disclose a wavelength range value for the UV light, a temperature range value for the hydrogen peroxide bath and a temperature value range for the drying air. DiGeronimo teaches irradiating at 254 nm (col.2, lines 50-52) and a temperature value range for the drying air (col.3, lines 13-14). As a result, it would have



been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by irradiating at 254 nm as taught by DiGeronimo since the lamp at such a wavelength operates at 99.9% efficiency (col.2, lines 50-52).

DiGeronimo fails to disclose a temperature range value for the hydrogen peroxide bath. Loliger teaches maintaining the hydrogen peroxide bath temperature at 60 degree Celsius (col.2, lines 70-71). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by heating the hydrogen peroxide bath to 60 degree Celsius as taught by Loliger since it is known in the art that at such a temperature packing sheet residence time in the bath is only 6 second that even kills heat-resistant germs (col.1, lines 30-33).

7. Claims 2-3, 5 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doucette et al (U.S.P.N. 3,513,627) in view of Kodera et al (U.S.P.N. 4,366,125) and further in view of DiGeronimo (U.S.P.N. 4,494,357).

Regarding claims 21 and 23, Doucette discloses an apparatus and a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs contaminated with microorganisms that includes the following: immersing the web into a liquid sterilant (figure 1:73) over an inherent time interval, applying heat from heater plates (figure 1:89 and col.3, lines 58-62) for drying the sterilant so that a substantial amount of the sterilant is removed from the surface of the web, then UV irradiating the web (figure 1:91). Doucette fails to teach the following: the use of liquid hydrogen peroxide, the use of air for retaining a residual quantity of hydrogen peroxide absorbed by or located

Art Unit: 1744

adjacent to microorganisms present on the surface of the sheet material and UV irradiating at wave length of about 200 nm and 320 nm. Koderá teaches a method for sterilizing a packaging sheet material (col.1, lines 8-13) including the following: applying a liquid solution of hydrogen peroxide to the surface of a packaging by advancing (figure 1, 3) the material into a hydrogen peroxide bath for immersing (means for applying) the material into a hydrogen peroxide bath (col.6, lines 25-28), which includes microorganisms, applying a stream of hot air (figure 1, 42) to the packaging sheet material for removing a substantial amount of hydrogen peroxide from the surface of the packaging material (col.5, lines 10-15) and irradiating the surface with UV light (figure 1, 34) at a certain wavelength value (figure 1, C) by directing UV light onto the surface of the material (figure 1, 34 and 1). The specification only teaches of microorganisms without providing any significance. As a result, the microorganisms present on the surfaces of the packaging sheet material in Koderá intrinsically absorb the residual hydrogen peroxide left after the step of drying. In addition, Koderá teaches the importance of the synergistic effect produced by the combination of hydrogen peroxide and UV (col.1, lines 13-18). Clearly, Koderá provides for a trace quantity of hydrogen peroxide for its interaction with the UV light. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Koderá, col.1, lines 15-18), to immerse web material for one second so that the sterilization process is performed over shorter cycles and to substitute heater plates with hot air

since aseptic hot air sterilizes and dries the two surfaces of the web material (Kodera, col.5, lines 12-14).

Kodera fails to explicitly disclose a wavelength range value for the UV light. DiGeronimo teaches irradiating at 254 nm (col.2, lines 50-52). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by irradiating at 254 nm as taught by DiGeronimo since the lamp at such a wavelength operates at 99.9% efficiency (col.2, lines 50-52).

Regarding claims 5 and 22, Doucette discloses a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs that are inherently hydrophobic contaminated with microorganisms that includes the following: immersing the web into a liquid sterilant (figure 1:73) over an inherent time interval, applying heat from heater plates (figure 1:89 and col.3, lines 58-62) for drying the sterilant so that a substantial amount of the sterilant is removed from the surface of the web, then UV irradiating the web (figure 1:91). Doucette fails to teach the following: the use of liquid hydrogen peroxide having a certain percent by weight value for hydrogen peroxide, the use of air for retaining a residual quantity of hydrogen peroxide absorbed by or located adjacent to microorganisms present on the surface of the sheet material, UV irradiating at wave length of about 200 nm and 320 nm and a temperature value for the heated air. Kodera teaches a method for sterilizing a packaging sheet material (col.1, lines 8-13) including the following: applying a liquid solution of hydrogen peroxide to the surface of a packaging by advancing (figure 1, 3) the material into a hydrogen peroxide bath for immersing (means for applying) the material into a hydrogen peroxide bath (col.6, lines

25-28), which includes microorganisms, applying a stream of hot air (figure 1, 42) the packaging sheet material for removing a substantial amount of hydrogen peroxide from the surface of the packaging material (col.5, lines 10-15), irradiating the surface with UV light (figure 1, 34) at a certain wavelength value (figure 1, C) by directing UV light onto the surface of the material (figure 1, 34 and 1) and means for advancing the packaging sheet material (figure 1, 3). The specification only teaches of microorganisms without providing any significance. As a result, the microorganisms present on the surfaces of the packaging sheet material in Koderia intrinsically absorb the residual hydrogen peroxide left after the step of drying. In addition, Koderia teaches the importance of the synergistic effect produced by the combination of hydrogen peroxide and UV (col.1, lines 13-18). Clearly Koderia provides for a trace quantity of hydrogen peroxide for its interaction with the UV light. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Koderia, col.1, lines 15-18) and to substitute heater plates with hot air since aseptic hot air sterilizes and dries the two surfaces of the web material (Koderia, col.5, lines 12-14).

Koderia fails to teach the following: a wavelength range value for the UV light, a concentration of at least 10% by weight and a temperature value range for the drying air. DiGeronimo teaches the following: irradiating at 254 nm (col.2, lines 50-52), a concentration of at least 10% by weight (the DiGeronimo reference teaches in col.3, lines 10-11, that a 30% hydrogen peroxide solution is used without specifying whether

Art Unit: 1744

the percentage is weight or volume. Assuming a 100 ml of solution and using the density of hydrogen peroxide, a 30 ml of hydrogen peroxide corresponds to 42.2 g of hydrogen peroxide, which is equivalent to 38 percent by weight) and a temperature value range for the drying air (col.3, lines 13-14). As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by irradiating at 254 nm as taught by DiGeronimo since the lamp at such a wavelength operates at 99.9% efficiency (col.2, lines 50-52).

Regarding claims 2-3 and 24, Doucette discloses a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs by immersing the web into a liquid sterilant (figure 1:73), but fails to teach the use of liquid hydrogen peroxide. Koderia discloses hydrogen peroxide bath concentration of 5% (col.6, lines 8-10). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Koderia, col.1, lines 15-18).

Koderia fails to teach hydrogen peroxide concentration of up to 50% or between 20% to 40%. DiGeronimo teaches in col.3, lines 10-11, that a 30% hydrogen peroxide solution is used without specifying whether the percentage is weight or volume. Assuming a 100 ml of solution and using the density of hydrogen peroxide, a 30 ml of hydrogen peroxide corresponds to 42.2 g of hydrogen peroxide, which is equivalent to 38 percent by weight. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by

optimizing the hydrogen peroxide concentration since such a modification is a matter of routine experimentation that depends on how much the packaging sheet material is contaminated with microorganisms, for example, heavily contaminated material requires higher concentration values for hydrogen peroxide.

Regarding claim 25, Doucette discloses a method (figure 1 and col.4, lines 2551) for sterilizing surfaces of webs by immersing the web into a liquid sterilant (figure 1:73) and applying heat from heater plates (figure 1:89 and col.3, lines 58-62) for drying the sterilant so that a substantial amount of the sterilant is removed from the surface of the web. Doucette fails to teach the use of heated air with a certain temperature. Koder a applies hot air (figure 1, 42 and 1) to the surface of the packaging sheet material without explicitly disclosing its temperature. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the germicidal liquid of Doucette with the liquid hydrogen peroxide because of the synergistic sterilization effect of combining hydrogen peroxide with UV light (Koder a, col.1, lines 15-18) and to substitute heater plates with hot air since aseptic hot air sterilizes and dries the two surfaces of the web material (Koder a, col.5, lines 12-14).

Koder a fails to disclose an explicit temperature for the hot air. DiGeronimo teaches applying an air stream of a temperature range value of between 150 to 155 degree Celsius (col.3, lines 13-14). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Doucette method by drying the packaging sheet material with air heated to a temperature of 150 degree Celsius as taught by DiGeronimo since such a modification is a matter of routine

experimentation that depends on how the desired amount of hydrogen peroxide removal intended.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doucette et al (U.S.P.N. 3,513,627) in view of Kodera et al (U.S.P.N. 4,366,125), DiGeronimo (U.S.P.N. 4,494,357) as applied to claim 21 and further in view of Lagunas-Solare et al (U.S.P.N. 5,364,645).

Doucette, Kodera and DiGeronimo all fail to disclose the use of polychromatic UV light source. Lagunas-Solare teaches that it is known to use Polychromatic UV light for surface microbial disinfection (col.1, lines 38-41). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Doucette method to include a polychromatic UV light source as taught by Lagunas-Solare since such a source is known to be effective in surface microbial disinfection (col.1, lines 51-52 and lines 9-11).

### ***Response to Arguments***

9. Applicant's arguments filed on 06/30/2006 have been fully considered but they are not persuasive.

On page 2 of the Reply, applicant argues that, "That the parts of a prior art apparatus are merely capable of being rearranged in the sequence required for the presently claimed invention does not meet the standard required for anticipation." The examiner disagrees and directs Applicant's attention to MPEP 2114 where apparatus claims are distinguishable over structural elements not over the manner of operation. The manner of operation does not further limit the scopes of the instant claims.

On bottom of page 4 to top of page 5 of the Reply, applicant presents Doucette method as immersing in second bath then UV irradiating and then heat drying. The examiner disagrees with this characterization of Doucette and refers Applicant to column 3, lines 43-65 where Doucette method is to immerse then applies heated air for drying and then irradiate with UV. Clearly, Doucette method is the same as the method of the instant claims.

On page 5 of the Reply, applicant argues that, "However, the modifications to Doucette that would be required to arrive at the present invention are so extensive and contrary to the approach taught by Doucette that a person of ordinary skill in the art would have had no motivation to make the modifications without express guidance, but the prior art does not even imply a suggestion to make such extensive modifications." The examiner disagrees with Applicant position that the modifications are extensive. Hydrogen peroxide and its use is a conventional as shown by Koderia on pages 5-9 of the action dated 03/30/2006. In addition, DiGeronimo and Loliger both are in the art of sterilizing webs with hydrogen peroxide. As shown on pages 5-9, advantages from the references provide for the obviousness rejections.

### ***Conclusion***

**10. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

**11.** A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not




Art Unit: 1744

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GLADYS J. CORCORAN can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



WILLIAM H. BEISNER  
PRIMARY EXAMINER  
GROUP 1744